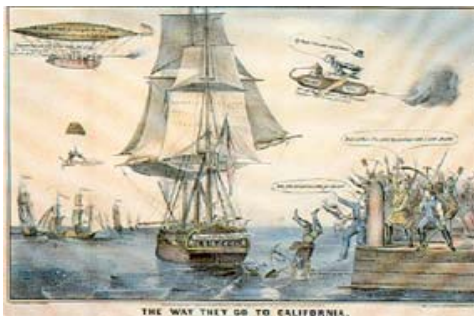




Color Lithograph of the Winfield Scott
Courtesy Deborah Marx

Panama Route



California Gold Rush Transportation Cartoon
Courtesy Robert Schwemmer

With the discovery of gold at Stutter's Mill in 1848, the California Gold Rush was launched. This event would mark the single largest migration of people from around the world to California, seeking their chance to strike it rich. The great "Gold Rush" made rise in the development of ships required to carry people and goods to California. Many easterners from the New England states chose not to take the overland route but looked to transportation that would provide a means to make the 14,000-mile journey by sea, around Cape Horn to this isolated frontier called California. This

was also true for European and Asian emigrants who had no choice but to travel by sea. Eventually, the shorter overland routes through **Panama** and Nicaragua offered argonauts with an opportunity to avoid rounding Cape Horn, with scheduled steamer service between **Panama** and San Francisco.

Winfield Scott History

Contemporary accounts filled east-coast newspapers reporting on the building of ships, both sail and steam. On 20 October 1850 the *New York Herald* announced, "Another New Steamer, of about two thousand tons will be launched from the shipyard of Westervelt & Makay [sic] on

Tuesday morning, 22d, at 10 o'clock. She is intended for the trade between **Panama** and San Francisco, and is constructed under the supervision of Capt. William Skiddy, for Davis, Brooks & Co. Her engines are from the Morgan Works. We understand that no expense has been spared to secure strength, safety and speed, and she will bear the name of the gallant General in chief of the army, Winfield Scott."



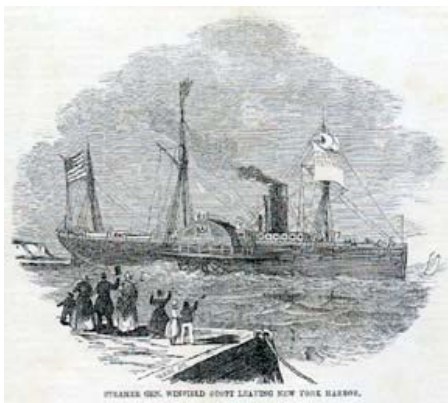
General Winfield Scott
Courtesy Deborah Marx

Two months later *The New York Journal of Commerce* reported on 14 December 1850, "Ship-Building and Steam Engines. – Business at the various yards and iron-works is still active. No new contracts for vessels, however, have been made recently, though there are some "nibbles," as the ship-builders say. At the Morgan Iron Works, three large steamships are moored, for the purpose of receiving machinery, viz.:-- the *Brother Jonathan*, *North America*, and *Winfield Scott*."

Winfield Scott was launched on 22 October 1850, built of wood with double iron bracing, that included White Oak, Live Oak, Locust, Cedar and Georgia Yellow Pine. Mounted to her round stern was an American eagle with a coat of arms and she had a bust carved in the likeness of General Winfield Scott. The steamer had accommodations for 165 cabin and 150 steerage passengers, although she would ultimately carry numbers exceeding 400. From her round stern to the straight stem, she had a registered length of 225 feet and a 45 foot beam. In 1851, Gleason's Pictorial provided a detail description "her lines partakes somewhat of the "hollow" kind, beautifully swelling to her extreme width, and as beautifully tapering off again as they approached her stern. On deck are the captain and clerk's offices, and also the kitchen – all very commodious. Between decks, aft, is the general drawing room, with sofas along the entire length, and staterooms on each side, each furnished with two berths. The forward saloon is similarly arranged. Beneath the drawing room is the dinning saloon, in which more than 100 persons can be comfortably seated; it also has staterooms at each side, all thoroughly ventilated and well lighted. Forward are the pantries, main semi circular staircase. Beneath the dining saloon is the steerage, also very airy and light. The ventilating and lighting of the vessel reflect great credit on Captain Skiddy, but few vessels being able to boast of such excellence in these important necessities to the comfort and health of her passengers."



Bust General Winfield Scott
Courtesy Deborah Marx

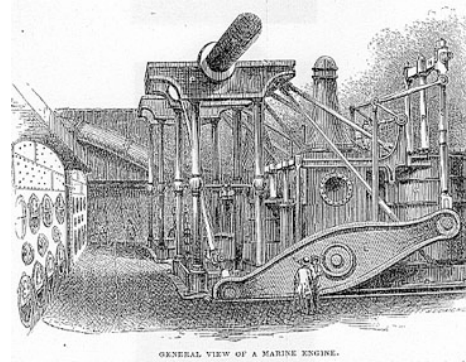


Winfield Scott Departing New York
Courtesy Robert Schwemmer

Winfield Scott was not immediately dispatched to the Pacific Coast but was engaged in servicing the New York – New Orleans route, under the flag of Davis, Brooks and Company. In 1852, ownership transferred to the New York and San Francisco Steamship Company Line and the side-wheel passenger steamer arrived in San Francisco, via Cape Horn, on 28 April 1852. She was advertised as "doubled engined" connecting with the steamer *United States* for New York. The line changed

its name on 18 May 1853 to New York and California Steamship Company and retained ownership of the *Winfield Scott* until the company came to an end, and she was sold on 8 July 1853 to the Pacific Mail Steamship Company. The steamer had become quite popular on the **Panama** - San Francisco route and provided not only passenger service but carried important intelligence, mail, newspapers, express freight which included gold mined from the mother-load returning east.

Winfield Scott's power plant consisted of two Morgan Iron Works side-lever steam engines driving two paddle-wheels, assisted by square sails on the foremast. This propulsion system was widely used from 1820 to 1860, in both the Atlantic and Pacific regions. There were many versions of the side-lever design with the piston moving levers that were directly positioned on each side of the engine. As the pistons moved in an upward and downward motion the levers were connected at the opposite ends by crosstails fastened to a connecting rods that turned the cranks. The cranks were connected to the port and starboard paddle-wheel shafts, which rotated the large paddle-wheels.



Two Side Lever Engines
Harper's Monthly Magazine 1851

The early steam propulsion system was not without its problems as passenger **Asa Cyrus Call** noted in his diary on 1 December 1853. "I embarked on the Steamer *Winfield Scott* last Thursday, and at 12 o'clock we left Vally's [sic] St. Wharf for **Panama**. We had fine weather till Friday evening when it became foggy. One of the boilers had been leaking through the day which had retarded our progress, and the *Sierra Nevada* had passed us, but it was repaired on Friday afternoon, and we were running about twelve miles an hour, when I went to bed on Friday night."



Passenger Asa Cyrus Call
Courtesy John Call Family



Survivors Waving Down A Steamer
Courtesy Robert Schwemmer

Passenger Edward Bosqui recalls what happened later that night. "At midnight I was suddenly awakened from a sound sleep by a terrible jar and crashing of timbers. Tumbling out of my berth, I was confronted by the horror stricken visage of my toothless and baldheaded stateroom companion, who had not time to secure his wig and false teeth and was groping about to find them. Leaving him paralyzed with fear, I hurried out on deck, where my

attention was fixed on a wall of towering cliffs, the tops of which were hidden by the fog and darkness and appeared about to fall and crush us. All round was the loud booming of angry breakers surging about invisible rocks.”

Winfield Scott became a total loss at Anacapa Island, with over 400 passengers becoming stranded on the small island. On the following day the side-wheel steamer *California*, on her north bound run to San Francisco from **Panama** with a full complement of passengers, arrived at the island and took on some of the women and children and the cargo of gold bullion. After eight long days on the island, the *California* returned well provisioned and rescued the remaining passengers and continued onto **Panama**. The crewman stayed behind to recover what they could of the remaining mail and passenger baggage still submerged in the hull.



West Anacapa Island Location of Survivors' Camp
Photo Robert Schwemmer



Salvaged Piston and Crosshead
Courtesy San Francisco Maritime
National Historical Park

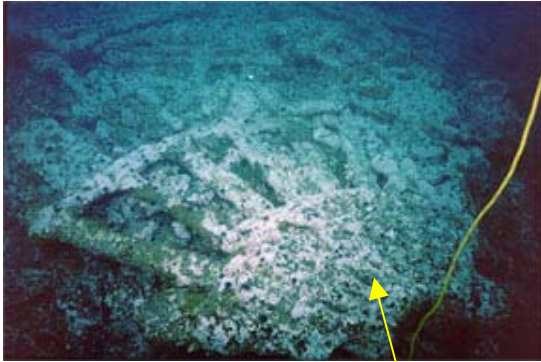
Today the submerged remains of the *Winfield Scott* lie within NOAA - Channel Islands National Marine Sanctuary and Channel Islands National Park. The site has been recorded and continues to be studied by archaeologists representing both agencies, assisted by the Coastal Maritime Archaeology Resources (CMAR) organization. Although the site has seen commercial salvage over the years, including as late as World War II, portions of her side-lever machinery still remain to be studied in 30 feet of water. Since extensive literature research has not yielded historic records on her machinery, these artifacts provide substantial evidence of mid 19th century engineering.



CMAR Divers
Photo Robert Schwemmer

Winfield Scott Shipwreck Site Today

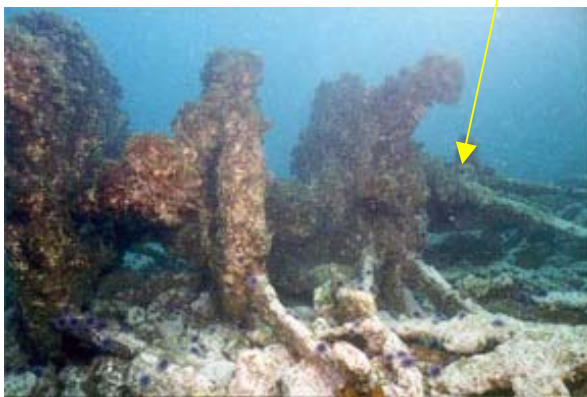
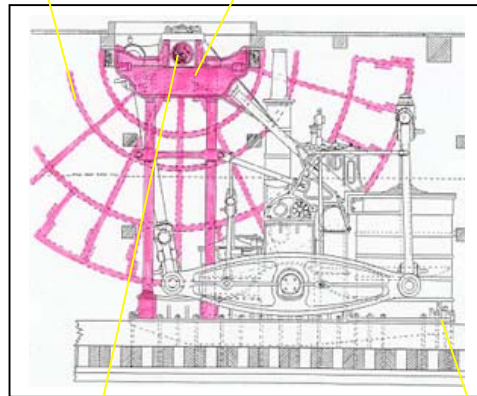
The most apparent artifacts are the paddle-wheel shaft and hub, and the paddle-wheel shaft support.



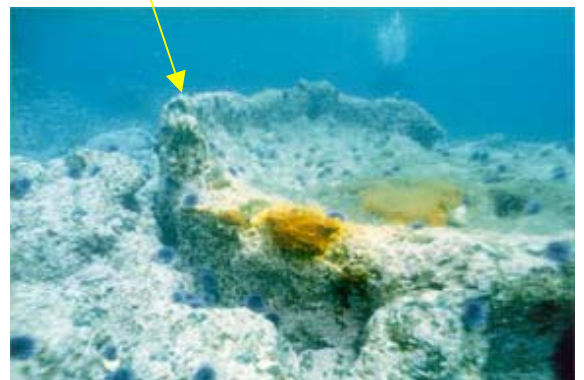
Paddle-Wheel Bracing
Photo Robert Schwemmer



Paddle-Wheel Support
Photo Robert Schwemmer



Paddle-Wheel Shaft and Hub
Photo Robert Schwemmer



Piston Cylinder Base
Photo Robert Schwemmer



Crosshead
Photo Robert Schwemmer

Two crossheads that once connected to the upper position of the piston rods are visible at the site.

Little remains of her wooden hull after 150 years on the sea floor surface, but a portion of her outer hull with copper sheathing and yellow metal drifts is still visible.



Wooden Hull and Non-Ferrous Drifts
Photo Deborah Marx



Copper Sheathing Attached To Wood
Photo Robert Schwemmer

Pacific Mail Steamship Company

Nearly twenty years after the *Winfield Scott* was launched the Pacific Mail Steamship Company's Report of the President To the Stockholders in 1868, continued to advocate the construction of side-wheel steamers over the propeller driven system. In Part "The statistics of the Company's steam-ships demonstrate that they can accomplished more work in a satisfactory manner, at less cost, than any screw steamer yet built, of which I have any knowledge. On the [Panama](#) route, this fact has been notorious, to the wonder of all experienced ship-masters and other experts, who have had the opportunity for comparison."

Cuba and Winfield Scott Comparison Of Two Vessels Working the Panama Route

In 1897, just forty-seven years since the *Winfield Scott* was launched, great advancements in the evolution of steam propulsion systems were evident as in the Pacific Mail Steamship Company's passenger cargo steamer *Cuba*, later shipwrecked at San Miguel Island in 1923. The shipwrecks *Winfield Scott* and *Cuba* have provided researchers with an opportunity to view the evolution of steam propulsion, paralleling two vessels operating under the same steamship company and employed on the same trade route to *Panama*. In just forty-seven years a streamline steel hull has replaced *Winfield Scott*'s extreme sheer wooden hull. The large side-wheel paddles that once buffeted the ocean surface have been replaced by totally submerged twin 13-foot bronze propellers. *Winfield Scott*'s Morgan Iron Works side-lever engines gave way to the *Cuba*'s twin Blohm and Voss triple-expansion engines.



Underwater Archaeology Exhibit
Photo Robert Schwemmer

Santa Barbara Maritime Museum

The underwater archaeology exhibit at the **Santa Barbara Maritime Museum** features a diorama of the shipwreck site. A simulated diver working from a model of the sanctuary research vessel *Shearwater*, tours the site stopping at various 19th century artifacts. A monitor exhibiting actual underwater videotape footage runs consecutively, providing an overview of the history and work being performed by underwater archaeologists. Also included with the exhibit are historic artifacts from the *Winfield Scott* and examples of tools underwater archaeologists use to record shipwrecks



Artifacts and Archaeologist Tools
Photo Robert Schwemmer



Underwater Diorama and Video
Photo Robert Schwemmer

Schwemmer, Robert, Paddle-Wheels To Propellers Forty-Seven Years In The Evolution Of Steam Propulsion (1850-1897), Presented At the Society For Historical Archaeology Conference, 2000 [In-Part]